

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims:

1. (Previously Presented) An encryption apparatus, comprising:

hold means for holding a part or all input data with a trigger signal and resetting held data with a reset signal;

one or a plurality of counters that count up or count down count values with the trigger signal and reset the count values to predetermined values with the reset signal;

encryption means for reading the data held by the hold means and one or a plurality of the count values and for encrypting the data held by the hold means and one or a plurality of the count values of the one or plurality of counters;

calculation means for calculating the output of the encryption means and input data that are input from the outside according to a first predetermined rule, encrypting the input data, and outputting the encrypted data;

a path that inputs a part or all the encrypted data that are output from the calculation means to the hold means; and

signal generation means for generating the trigger signal and the reset signal supplied to the hold means and the one or plurality of counters according to a second predetermined rule and/or at predetermined timing,

wherein the encryption means reads in parallel the data held by the hold means, one or a plurality of the count values, and a key outputted by the signal generation means, and

wherein the input data is sequentially inputted to the calculation means in a predetermined unit, and the data held by the hold means is reset in each predetermined unit so that data in a preceding unit of the input data is excluded from affecting encryption of a current unit of the input data.

2. (Original) The encryption apparatus as set forth in claim 1,
wherein a fixed value is input to the encryption means, and
wherein the encryption means encrypts the fixed value, the data held by the hold means, and the one or plurality of count values.

3. (Original) The encryption apparatus as set forth in claim 1,
wherein the reset signal that resets the data held by the hold means is supplied to the hold means at timing in synchronization with the reset signal supplied to at least one of the one or plurality of counters.

4. (Original) The encryption apparatus as set forth in claim 1,
wherein the input data are picture data, and
wherein the reset signal that resets the hold means is in synchronization with the picture data.

5. (Original) The encryption apparatus as set forth in claim 4,
wherein the reset signal that resets the hold means is in synchronization with each line of
the picture data.

6. (Original) The encryption apparatus as set forth in claim 1,
wherein the input data are picture data, and
wherein the reset signal that resets at least one of the one or plurality of counters is in
synchronization with the picture data.

7. (Original) The encryption apparatus as set forth in claim 6,
wherein the reset signal that resets at least one of the one or plurality of counters is in
synchronization with each frame of the picture data.

8. (Original) The encryption apparatus as set forth in claim 6,
wherein the reset signal that resets at least one of the one or plurality of counters is in
synchronization with each line of the picture data.

9. (Previously Presented) An encryption method, comprising the steps of:
holding a part or all input data with a trigger signal and resetting held data with a reset
signal;
counting up or down count values with the trigger signal and resetting the count values to
predetermined values with the reset signal;

reading the data held by the hold step and one or a plurality of the count values;

encrypting the data held at the hold step and one or a plurality of the count values at the count step;

calculating the output at the encryption step and input data that are input from the outside according to a first predetermined rule, encrypting the input data, and outputting the encrypted data;

inputting a part or all the encrypted data that are output at the calculation step to the hold step; and

generating the trigger signal and the reset signal supplied to the hold step and the count step according to a second predetermined rule and/or at predetermined timing,

wherein the encrypting step reads in parallel the data held by the holding step, one or a plurality of the count values, and a key outputted by the generating step, and

wherein the input data is sequentially inputted to the calculating step in a predetermined unit, and the data held by the holding step is reset in each predetermined unit so that data in a preceding unit of the input data is excluded from affecting encryption of a current unit of the input data.

10. (Canceled)

11. (Previously Presented) A record medium storing an executable program that, when executed, causes a computer to encrypt data, the program comprising the steps of:

holding a part or all input data with a trigger signal and resetting held data with a reset signal;

counting up or down count values with the trigger signal and resetting the count values to predetermined values with the reset signal;

reading the data held by the hold step and one or a plurality of the count values;

encrypting the data held at the hold step and one or a plurality of the count values at the count step;

calculating the output at the encryption step and input data that are input from the outside according to a first predetermined rule, encrypting the input data, and outputting the encrypted data;

inputting a part or all the encrypted data that are output at the calculation step to the hold step; and

generating the trigger signal and the reset signal supplied to the hold step and the count step according to a second predetermined rule and/or at predetermined timing,

wherein the encrypting step reads in parallel the data held by the holding step, one or a plurality of the count values, and a key outputted by the generating step, and

wherein the input data is sequentially inputted to the calculating step in a predetermined unit, and the data held by the holding step is reset in each predetermined unit so that data in a preceding unit of the input data is excluded from affecting encryption of a current unit of the input data.

12. (Previously Presented) A decryption apparatus that decrypts encrypted data encrypted by an encryption apparatus, the decryption apparatus comprising:

hold means for holding a part or all input data with a trigger signal and resetting held data with a reset signal;

one or a plurality of counters that count up or count down count values with the trigger signal and reset the count values to predetermined values with the reset signal;

encryption means for reading the data held by the hold means and one or a plurality of the count values and for encrypting the data held by the hold means and one or a plurality of the count values of the one or plurality of counters;

calculation means for calculating the output of the encryption means and input data that are input from the outside according to a first predetermined rule, encrypting the input data, and outputting the encrypted data;

a path that inputs a part or all the encrypted data that are input from the outside to the hold means; and

signal generation means for generating the trigger signal and the reset signal supplied to the hold means and the one or plurality of counters according to a second predetermined rule and/or at predetermined timing,

wherein the encryption means reads in parallel the data held by the hold means, one or a plurality of the count values, and a key outputted by the signal generation means, and

wherein the input data is sequentially inputted to the calculation means in a predetermined unit, and the data held by the hold means is reset in each predetermined unit so

that data in a preceding unit of the input data is excluded from affecting encryption of a current unit of the input data.

13. (Original) The decryption apparatus as set forth in claim 12,
wherein a fixed value is input to the encryption means, and
wherein the encryption means encrypts the fixed value, the data held by the hold means,
and the one or plurality of count values.

14. (Original) The decryption apparatus as set forth in claim 12,
wherein the reset signal that resets the data held by the hold means is supplied to the hold
means at timing in synchronization with the reset signal supplied to at least one of the one or
plurality of counters.

15. (Original) The decryption apparatus as set forth in claim 12,
wherein the encrypted data are encrypted picture data, and
wherein the reset signal that resets the hold means is in synchronization with the picture
data.

16. (Original) The decryption apparatus as set forth in claim 15,
wherein the reset signal that resets the hold means is in synchronization with each line of
the picture data.

17. (Original) The decryption apparatus as set forth in claim 12,
wherein the encrypted data are encrypted picture data, and
wherein the reset signal that resets at least one of the one or plurality of counters is in
synchronization with the picture data.

18. (Original) The decryption apparatus as set forth in claim 17,
wherein the reset signal that resets at least one of the one or plurality of counters is in
synchronization with each frame of the picture data.

19. (Original) The decryption apparatus as set forth in claim 17,
wherein the reset signal that resets at least one of the one or plurality of counters is in
synchronization with each line of the picture data.

20. (Previously Presented) A decryption method of decrypting encrypted data
encrypted in an encryption method, the decryption method comprising the steps of:
holding a part or all input data with a trigger signal and resetting held data with a reset
signal;
counting up or down the count values with the trigger signal and resetting count values to
predetermined values with the reset signal;
reading the data held by the hold step and one or a plurality of the count values;
encrypting the data held at the hold step and one or a plurality of the count values at the
count step;

calculating the output at the encryption step and input data that are input from the outside according to a first predetermined rule, encrypting the input data, and outputting the encrypted data;

inputting a part or all the encrypted data that are input from the outside to the hold step;
and

generating the trigger signal and the reset signal supplied to the hold step and the count step according to a second predetermined rule and/or at predetermined timing,

wherein the encrypting step reads in parallel the data held by the holding step, one or a plurality of the count values, and a key outputted by the generating step, and

wherein the input data is sequentially inputted to the calculating step in a predetermined unit, and the data held by the holding step is reset in each predetermined unit so that data in a preceding unit of the input data is excluded from affecting encryption of a current unit of the input data.

21. (Canceled)

22. (Previously Presented) A record medium storing an executable program that, when executed, causes a computer to decrypt data, the program comprising the steps of:

holding a part or all input data with a trigger signal and resetting held data with a reset signal;

counting up or down the count values with the trigger signal and resetting count values to predetermined values with the reset signal;

reading the data held by the hold means and one or a plurality of the count values;
encrypting the data held at the hold step and one or a plurality of the count values at the
count step;

calculating the output at the encryption step and input data that are input from the outside
according to a first predetermined rule, encrypting the input data, and outputting the encrypted
data;

inputting a part or all the encrypted data that are input from the outside to the hold step;
and

generating the trigger signal and the reset signal supplied to the hold step and the count
step according to a second predetermined rule and/or at predetermined timing,

wherein the encrypting step reads in parallel the data held by the holding step, one or a
plurality of the count values, and a key outputted by the generating step, and

wherein the input data is sequentially inputted to the calculating step in a predetermined
unit, and the data held by the holding step is reset in each predetermined unit so that data in a
preceding unit of the input data is excluded from affecting encryption of a current unit of the
input data.